REMARKS

Claims 1, 3-7, 10, 11, 14-17, and 19-31 are currently pending in the subject application, and are presently under consideration. Claims 1, 3-7, 10, 11, 14-17, 19-21, 23, 24, 26, 27, 29, and 30 are rejected. Claims 22, 25, 28, and 31 have been indicated as allowable if rewritten in independent form. Claims 11 and 16 have been amended. Favorable reconsideration of the application is requested in view of the amendments and comments herein.

I. Objection to Claim 16

Claim 16 has been objected to because of the informality that the term "the low pass filter" in line 6 lacks an antecedent basis. Accordingly, claim 16 has been amended to change the term "the low pass filter" in line 6 to "a low pass filter." Withdrawal of the objection to claim 16 is respectfully requested.

II. Rejection of Claims 1, 3-4, 11, 14, 19-21 and 26-27 Under 35 U.S.C. §102

Claims 1, 3-4, 11, 14, 19-21, and 26-27 stand rejected under 35 U.S.C. §102 as being anticipated by U.S. Publication No. 2002/0110134 to Gracon, et al. ("Gracon"). Claim 11 has been amended. Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 1 recites delaying selected data of the data stream in said network by storing the selected data in memory buffers for a fixed delay amount. The Office Action dated July 12, 2005, asserts that the scheduler taught by Gracon schedules packets based on a fixed amount of delay, and that the scheduler schedules the packets based on the theoretical arrival time (TAT) (Office Action dated July 12, 2005, page 4; citing Gracon, page 6, paragraph [0062]). Representative for Applicant respectfully disagrees with the assertion that the TAT is a fixed delay amount. Gracon teaches that a new TAT is calculated when a shaped connection is serviced, the new TAT value being a function of the packet size associated with the sent packet and the configured rate of the connection (Gracon, page 6, paragraph [0062]). The TAT may thus be different for each packet depending on the packet size (Gracon, page 3, paragraph

[0037], last sentence). Accordingly, the calculated TAT value for a given packet is specific to that packet, and therefore cannot be a fixed delay amount as recited in claim 1. Thus, Gracon does not anticipate claim 1. Withdrawal of the rejection of claim 1, as well as claims 3-5 which depend therefrom, is respectfully requested.

Claim 3 recites that the fixed delay amount is stored in a configuration table, and that the delay device consults the configuration table to determine when to release the selected data from the memory buffers. The Office Action dated July 12, 2005, asserts that Gracon teaches a fixed amount of delay (the TAT) where the TAT is calculated based on predefined parameters stored in memory (Office Action dated July 12, 2005, page 4-5; citing Gracon, page 3, paragraph [0037]). The Office Action dated July 12, 2005, thus equates the TAT with the fixed delay amount recited in claims 1 and 3. As described above regarding claim 1, Gracon does not teach a fixed delay amount, as recited in claims 1 and 3. Additionally, in its assertion, the Office Action dated July 12, 2005, specifically states that the TAT is not stored in memory, but that it is calculated based on predefined parameters stored in memory. Therefore, assuming *arguendo* that the TAT is a fixed delay amount, it is not stored in a configuration table, as recited in claim 3. Gracon teaches that packets are released based on a calculated TAT that is specific to each packet (see, *e.g.*, Gracon, paragraphs [0037] and [0062]), but is silent as to a delay device consulting a configuration table to determine when to release selected data from memory buffers, as recited in claim 3. Accordingly, Gracon does not anticipate claim 3. Withdrawal of the rejection of claim 3 is respectfully requested.

Claim 11 has been amended for clarity and recites that the fixed delay amount is slowly adjusted over time by passing the data rate through a low-pass filter. Representative for Applicant respectfully submits that it is known in the art to use a low-pass filter to reduce the data rate of a propagated signal. However, claim 11 is distinguishable from the known art in that a fixed delay amount is slowly adjusted over time by passing the data rate through the low-pass filter, as opposed to instantaneous changes in the delay amount. This distinction is discussed in paragraph [0032] of the Present Application: "[I]nstead of utilizing the instantaneous rate itself to control the flow, rather the data rate is low pass filtered to provide a very slow change to the

configuration table so that the delay may be slowly adjusted over a long period of time." (Present Application, page 8, paragraph [0032]).

The Office Action dated July 12, 2005, asserts that Gracon teaches a low-pass filter that slowly adjusts a delay amount over time (Office Action dated July 12, 2005, page 2). Representative for Applicant respectfully disagrees with this assertion. As discussed in the Response to the Office Action dated January 11, 2005, at pages 10-11, the low-pass filter discussed in Gracon is used to calculate an average queue size, such that the average queue size is compared with a threshold value to determine if a packet should be dropped (Gracon, paragraph 45). The low-pass filter taught by Gracon is part of the congestion control manager that is configured upstream of the packet scheduler (Gracon, paragraph 45). These facts are acknowledged in the Office Action dated July 12, 2005 (at page 2). Because the low-pass filter taught by Gracon is upstream of the packet scheduler, it cannot be used to slowly adjust the delay time utilized by the packet scheduler. The low-pass filter taught by Gracon is merely used to determine whether to keep a packet or to drop it prior to the packet entering the packet scheduler. The delay amount utilized by the packet scheduler in Gracon is thus independent of the operation of the low-pass filter. The Office Action dated July 12, 2005, asserts that "the output of the low pass filter variable [sic] controls the data rate since the output leads to the packet scheduler which time schedules the packet." (Office Action dated July 12, 2005, page 2). This assertion is incorrect because there is no direct correlation in the teachings of Gracon between the operation of the low-pass filter and the way in which the packet scheduler time schedules the packet, as opposed to the recitations of claim 11. The low-pass filter taught by Gracon therefore does not slowly adjust a delay amount over time, as recited in claim 11.

In addition, as discussed above with regard to claims 1 and 3, the TAT that is used by the packet scheduler taught by Gracon is specific to the packet to which it applies. The TAT is therefore an instantaneous data rate measurement because the system of Gracon separately and distinctly calculates a TAT for each individual packet. As discussed above, the language of claim 11 is distinguishable from prior art data rate modification in that claim 11 recites a fixed delay amount that is slowly adjusted over time by passing the data rate through the low-pass

filter, and not an instantaneous change in the delay amount as taught by Gracon and other prior art systems (see, *e.g.*, Present Application, paragraph [0032]). Therefore, for all of the reasons discussed above, Gracon does not anticipate claim 11. Withdrawal of the rejection of claim 11, as well as claims 14 and 15 which depend therefrom, is respectfully requested.

Claims 19 and 26 recite determining selected data of the data stream by employing a packet selection list that indicates which of the data packets are to be delayed selected data. The Office Action dated July 12, 2005, asserts that the selected data in Gracon is the packet descriptor information because the packets are placed into queues based on flows and then serviced based on the flow (Office Action dated July 12, 2005, page 5). Representative for Applicant respectfully disagrees with this assertion. Gracon teaches that each packet ID corresponding to a packet is queued in a virtual output queue, and that a feedback signal from the packet manager selects a queued packet ID from the queue to transmit the corresponding packet (Gracon, paragraphs [0031] and [0070]). Gracon, however, is silent as to a packet selection list that indicates which of the packets are to be delayed. In addition, Gracon teaches that the packet scheduler performs policing and congestion management processes on any received packet, such that packets are either dropped or sent according to the schedule. Gracon thus teaches that all of the data packets are to be delayed, and not just selected data, as recited in claims 19 and 26. Furthermore, in rejecting claims 1, 3, and 11 as discussed above, the Office Action dated July 12, 2005, equates the delayed selected data recited in claims 1, 3, and 11 with the packets that are released by the packet scheduler according to the TAT. The above assertion that the packet descriptor information in Gracon reads on the selected data is therefore contradictory with the prior arguments against patentability in the Office Action dated July 12, 2005. The packet IDs taught by Gracon are selected from the virtual output queue to transmit the corresponding packet, not to transmit the packet ID itself. Therefore, for all of the above reasons, Gracon does not anticipate claims 19 and 26. Withdrawal of the rejection of claims 19 and 26, as well as claims 20, 21, and 27 which depend respectively therefrom, is respectfully requested.

Claims 20 and 27 recite that the amount of time that the selected data is stored in the memory buffers is based on an amount of delay stored in a configuration table. As discussed

above regarding claim 3, Gracon does not teach that an amount of delay is stored in a configuration table. Gracon teaches that an amount of delay is based on the TAT and a packet arrival time (Ta), which is acknowledged in the Office Action dated July 12, 2005 (page 5). However, the TAT, as discussed at length above, is an instantaneously calculated value for each packet, and the Ta is an actual arrival time of the packet. Neither of these values are stored in a configuration table. Accordingly, Gracon does not anticipate claims 20 and 27. Withdrawal of the rejection of claims 20 and 27, as well as claim 21 which depend from claim 20, is respectfully requested.

For the reasons described above, claims 1, 3, 4, 11, 14, 19-21, 26, and 27 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

III. Rejection of Claims 5-7, 10, 15-17, 23-24 and 29-30 Under 35 U.S.C. §103(a)

Claims 5-7, 10, 15-17, 23-24 and 29-30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gracon in view of U.S. Patent No. 6,732,168 to Bearden, et al. ("Bearden"). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claims 5 and 15, which depend from claims 1 and 11, respectively, recite that the network includes at least one client processor, at least one server processor, at least one network router, and a delay processor. Claim 1 recites delaying selected data of the data stream in the network by storing the selected data in memory buffers for a fixed delay amount. As described above regarding claim 1, Gracon does not teach a fixed delay amount, as recited in claim 1. Additionally, claim 11 recites that the fixed delay amount is slowly adjusted over time by passing the data rate through a low-pass filter. As described above regarding claim 11, Gracon does not teach that the fixed delay amount is slowly adjusted over time by passing the data rate through a low-pass filter, as recited in claim 11.

The addition of Bearden does not cure the above cited deficiencies of Gracon to teach or suggest claims 1 and 11, from which claims 5 and 15 depend. Bearden teaches a policy-based network management system realized by policy-based management programs defined by policy packages (Bearden, Abstract), and is relied upon by the Office Action dated July 12, 2005 (page

6), to teach a network that includes a client processor, at least one server processor, and at least one network router. However, neither Gracon nor Bearden, individually or in combination, teach or suggest claims 1 and 11, from which claims 5 and 15 depend. Therefore, claims 5 and 15 should be allowed over the cited art. Withdrawal of the rejection of claims 5 and 15 is respectfully requested.

Claim 6 recites a delay processor for controlling the data rate in a network, the delay processor being operative to store data packets in a plurality of memory buffers for a fixed amount of time and releasing the data packets after the fixed amount of time to increase latency of the network. For the reasons discussed above regarding claim 1, Gracon does not teach or suggest storing data packets in a plurality of memory buffers for a fixed amount of time, as recited in claim 6. Therefore, Gracon does not teach or suggest controlling the data rate in a network by storing data packets in a plurality of memory buffers for a fixed amount of time and releasing the data packets after the fixed amount of time to increase latency of the network, as recited in claim 6.

The addition of Bearden does not cure the deficiencies of Gracon to teach or suggest claim 6. Bearden is relied upon by the Office Action dated July 12, 2005 (page 7) to teach a first processor and a second processor each connected to the network. However, neither Gracon nor Bearden, individually or in combination, teach or suggest a delay processor for controlling the data rate in a network, the delay processor being operative to store data packets in a plurality of memory buffers for a fixed amount of time and releasing the data packets after the fixed amount of time to increase latency of the network, as recited in claim 6. Therefore, claim 6 should be allowed over the cited art. Withdrawal of the rejection of claim 6, as well as claims 7 and 10 which depend therefrom, is respectfully requested.

Claim 10 recites that the fixed amount of time is stored in a configuration table, the delay processor consulting the configuration table to determine when to release the data packets from the memory buffers. For the reasons discussed above regarding claim 3, Gracon does not teach or suggest claim 10. Also, the addition of Bearden does not cure the deficiencies of Gracon to teach or suggest claim 10, such that neither Gracon nor Bearden, alone or in combination, teach

or suggest that the fixed amount of time is stored in a configuration table, the delay processor consulting the configuration table to determine when to release the data packets from the memory buffers, as recited in claim 10. Withdrawal of the rejection of claim 10 is respectfully requested.

Claim 16 recites a delay processor for controlling the data rate in a network, the delay processor delaying data in the network by storing the data in memory buffers and releasing the data after a delay, the amount of the delay being variably controlled by the output of the low pass filter, where the low pass filter receives the data rate as an input. For the reasons discussed above regarding claim 6, neither Gracon nor Bearden, individually or in combination, teach or suggest a delay processor for controlling the data rate in a network, the delay processor delaying data in the network by storing the data in memory buffers and releasing the data after a delay, the amount of the delay being variably controlled by the output of the low pass filter, where the low pass filter receives the data rate as an input, as recited in claim 16. Therefore, claim 16 should be allowed over the cited art. Withdrawal of the rejection of claim 16, as well as claim 17 which depends therefrom, is respectfully requested.

Claims 23 and 29 recite that the delay processor comprises a packet selection list that indicates which of the data packets are to be delayed through the delay processor. For the reasons discussed above regarding claims 19 and 26, neither Gracon nor Bearden, individually or in combination, teach or suggest that the delay processor comprises a packet selection list that indicates which of the data packets are to be delayed through the delay processor. Therefore, claims 23 and 29 should be allowed over the cited art. Withdrawal of the rejection of claims 23 and 29 is respectfully requested.

Claims 24 and 30 recite that the delay processor comprises a clock circuit and a controller operative to determine the fixed amount of time the data packets are stored in the memory buffers based on an amount of delay stored in a configuration table. For the reasons discussed above regarding claims 20 and 27, neither Gracon nor Bearden, individually or in combination, teach or suggest that the delay processor comprises a clock circuit and a controller operative to determine the fixed amount of time the data packets are stored in the memory buffers based on

an amount of delay stored in a configuration table. Therefore, claims 24 and 30 should be allowed over the cited art. Withdrawal of the rejection of claims 24 and 30 is respectfully requested.

For the reasons described above, claims 5-7, 10, 15-17, 23-24, and 29-30 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

CONCLUSION

In view of the foregoing remarks, Applicant respectfully submits that the present application is in condition for allowance. Applicant respectfully requests reconsideration of this application and that the application be passed to issue.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

Date 9/9/05

Christopher P. Harris
Registration No. 43,660

CUSTOMER NO.: 26,294

TAROLLI, SUNDHEIM, COVELL, & TUMMINO L.L.P.
526 SUPERIOR AVENUE, SUITE 1111
CLEVELAND, OHIO 44114-1400
Phone: (216) 621-2234
Fax: (216) 621-4072